SERVICE NEWS

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UNITED STATES DEPARTMENT OF AGRICULTURE

The NEWS is intended to inform staff members of developments within the Service and is not for distribution to others.

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RESEARCH CONFERENCE

A four-day conference of experiment station superintendents and work project leaders is being held in the South Building May 16--21. Members of the Washington research staff and representatives of other divisions of the Service and of the Department of Agriculture will attend and speak. Thirty-four research men from the field are expected to be present at the conference.

COOPERATION WITH INDIAN SERVICE

The Indian Service, which is making land utilization and land management the basic principle of its educational program, held a National Educational Conference at Denver during the week of April 25. About 100 were in attendance, including Indian Service superintendents, school superintendents, and high school principals from all parts of the United States, the educational staff of the Washington office of the Indian Service, and the staff of the T.C.B.I.

Because, for some time past, the Indian Service and the Soil Conservation Service have been cooperating closely in development of sound land use practices among the Indians, the Service was asked to participate in the Denver conferences. It was represented by Julia B. Tappan of the Albuquerque office and Arthur W. Emerson of the Rapid City office, who have been working with the Indian Service in their respective regions. Miss Tappan contributed to the round table discussions; and Mr. Emerson spoke to the conference on the way in which the SCS can assist the Indian Service in applying the basic principles of good land use to Indian lands, and discussed the way in which the teaching of soil and water conservation can be integrated into the curricula of the Indian schools.

DUST STORMS

Not much has been heard this spring about dust storms. "Nature took care of them this year," Gordon K. Zimmerman, in charge of radio,

announced last week in the National Farm and Home Hour broadcast. "Rainfall was fairly heavy over the Southern Plains last fall," Mr. Zimmerman continued, "and during the winter and so far this spring moisture conditions have been considerably better than for a number of years. It's simply a case of more moisture in the soil; and of course wet soil isn't likely to blow. Then, too, the added moisture in the soil gave vegetation a chance to come back. And in the last analysis, that's the only real cure for wind erosion and dust storms."

CONTROLLING EROSION ON THE NATION'S HIGHWAYS

Thirty-two States have signed memoranda of understanding with the Soil Conservation Service by which they agree to establish research projects for highway erosion control, according to Arnold M. Davis, in charge of that phase of the Engineering Section's work.

In 22 of these States, some 80 projects, averaging from 1 to 2½ miles in length, have been selected, and most of them are already under construction. Cooperating with the Service in this work are State Highway Departments, the Bureau of Public Roads, and the Highway Research Board.

Purposes of the demonstrations are three:

1) To determine the most economical method of controlling erosion on highways and sloping banks, and around drainage structures.

2) To promote the application of successful measures to new road construction and to highways under repair.

3) To develop economical means of water disposal.

It is expected that nationwide application of successful erosion-control measures for highways will, among other things, prevent damage to roads and increase their safety, reduce highway maintenance costs, protect adjoining agricultural land, stop destructive run-off from pavements and ditches, improve the appearance of roads, and promote better relations between landowners and highway officials.

In connection with the demonstration program, the Service has controlled erosion on more than 200 miles of State, county, and township roads adjoining cooperators' farms.

The newly formed soil conservation districts are requesting the Service's technical assistance in planning control methods for roads within the districts, and information gained from the research projects will be available to Service personnel who work cooperatively with the districts.

In a recent field memorandum, the Chief suggests that, where conditions are adaptable, every project and camp do some highway work as a basis for future recommendations and practices that may be carried on in the district program.

FISCAL INSPECTION

G. G. Smith, Chief Fiscal Officer, has just returned from Regions 5, 9, and 11, where he visited regional, project, and CCC offices. He reports that there is considerable improvement in the manner in which the fiscal work is being handled.

On April 30, Mr. Smith attended the meeting of the regional soils men conducted by E. A. Norton, Head of the Section of Conservation Surveys, in Salt Lake City, Utah. The method of financing this work for the coming year was the principal fiscal topic discussed.

FISCAL OFFICERS TO MEET

The annual meeting of the regional fiscal officers will be held in Washington May 23--25. C. H. Dorney of Des Moines, Iowa, has been designated to arrange the agendum for the meeting and to act as chairman. A. R. Rosin of Spokane, Wash., and P. J. Albers, of Albuquerque, N. M., are the other members of the committee.

This year's meeting will be conducted by the regional men, who will suggest the topics for consideration and lead the discussions. Representatives of the Washington office will attend all sessions to render all possible assistance. It is hoped that, as a result of the meeting, perplexing problems in the field at the present time may be eliminated, and that definite plans will be made for improvements in fiscal organization and procedure.

NEW SECTION HEAD

The vacancy at the head of the Section of Cooperative Relations in Extension, created when J. Phil Campbell became Chief of the Division of Cooperative Relations and Planning, was filled last month by the appointment of Ivan L. Hobson, formerly assistant to Mr. Campbell.

Mr. Hobson, in private life an investment banker, has been connected with the Federal Extension Service and the 4-H Clubs of the Department of Agriculture, and with the Farm Credit Administration, where he was in charge of the section handling loans to farm cooperatives, prior to joining the staff of the Soil Conservation Service in 1937.

SCS MODEL ON EXHIBITION

On display in the Administration Building the latter part of April was a miniature watercycle lysimeter, modeled on a more elaborate device used to measure rainfall on the SCS research project at Coshocton, Ohio.

In the exhibit, water falling on two small plots of ground, one covered by bluegrass sod, the other sparsely vegetated and lacking most of its topsoil, is measured by the lysimeter as it runs off to show their respective soil and water losses.

The model, designed by W. D. Ellison, manager of the Coshocton project, has been shown at numerous schools, scientific meetings, and farmers' gatherings, and went from the Administration Building to the Academy of Sciences, where the American Geophysical Union was holding its annual meeting.

GEORGIA FIELD DAY

Dillon S. Myer, Assistant Chief of the Service, and J. Phil Campbell, Chief of the Division of Cooperative Relations and Planning, were featured speakers at the second annual field day of the Lindale, Ga., project late last month.

The exercises, sponsored by the board of supervisors of the newly organized Coosa River soil conservation district, were attended by some 2,000 persons, and included a tour of the project conducted by its manager, W. W. Howell.

Mr. Myer traced the growth of Soil Conservation Service work from the demonstration to the district stage, and described briefly the operation of the districts law.

Mr. Campbell, native Georgian and onetime director of the State Extension Service, praised the 30,000-acre demonstration project as a model testing ground for erosion control practices, but pointed out that North Georgia farmers must now be prepared to move from a single area to the whole district, and to apply proved conservation methods to individual farms in seven counties.

The Coosa River district, as the first in the U. S. to be approved by the Department of Agriculture, has a responsibility which it cannot discharge unless supervisors, assisting agencies, and farmers cooperate locally, Mr. Campbell said; and added that he would not pay the district another visit until every community in it had taken advantage of the opportunity to organize local groups which would assist the supervisors in conserving the soil and its resources.

NEW RADIO PROGRAM

On April 30, the Service inaugurated a new radio program over Cincinnati's 500-kilowatt WLW, the nation's most powerful station. The 15-minute broadcast each Saturday at 6 p.m., Eastern Standard Time, is likewise carried over the short wave by station W8XAL.

Programs thus far have consisted of brief dramatizations combined with dialogue between two staff members. The Chief will take part in next Saturday's (May 21) broadcast.

SCS PHOTOGRAPHS IN NEW YORK

"The Camera Charts the Land for Conservation" was the caption of the Service's exhibit at the First International Photographic Exhibition held at the Grand Central Place, New York City, last month.

Designed to show the use of photography in illustrating a sequence of changing conditions, the exhibit developed its central theme by grouping its items under three sub-titles: "The Camera Sees Erosion," "The Camera Is a Tool in Conservation Planning," and "The Camera Records the Conservation Pattern." Aerial views, the nuclei of each group, were surrounded by ground photographs selected for subject matter and pictorial excellence.

The Internation Exhibition, which attracted thousands of visitors, showed more than 3,000 prints chosen from 17,000 entries covering all subjects and all branches of photography. The week's program included lectures, demonstrations, and showings of amateur motion pictures. Chief Photographer Richard A. Mawhinney was in charge of the SCS exhibit.

FARM WOODLANDS STUDIED

How the farmer's economic position may be improved by changes in management of his woodlands is set forth in statistics just released by Region 3.

A survey made of 107 farms on the Howell, Mich., project area shows that the annual wood requirements of each for fuel, fence posts, building construction, and repairs is 1,419 cubic feet, although present production is at the rate of only 727 cubic feet per farm, about half the amount needed. Wood is selling in the area at 10 cents a cubic foot, so the farmer must make an annual cash outlay of some $70.

The difference can be made up, the survey states, by (1) doubling the farm timber acreage, or (2) stepping up the rate of growth by exclusion of grazing, protection from fire, and better management practices. If the second method is adopted, the increased production per unit of area

will mean lower production costs; and if approximately 5 percent of the less desirable land on each farm is retired to permanent forest, there will be surplus wood for sale, thus further strengthening the farmer's cash position.

DISTRICTS ORGANIZED

The SCS has agreed to assist 24 of the 39 soil conservation districts organized under the districts law, Secretary Wallace announced early this month.

So far, 22 States have adopted district laws, and districts comprising 19,000,000 acres of land have already been set up in 11 of these. In order to form a district, a group of 25 or more farmers living in a watershed or other well-defined natural area within a State which has enacted a law must petition the State Soil Conservation Committee. When boundaries have been decided upon, a referendum of all dwellers within the area is held; and if a majority is in favor of the plan, a board of supervisors is chosen to formulate and carry out appropriate land-use practices.

Each district is a political subdivision of the State, and as such may receive State and Federal assistance if planning is satisfactory and if it agrees to furnish a large part of the necessary equipment, material, and labor.

PUBLICATION NOTES

Angus McDonald, of the Section of Climatic and Physiographic Research, is the author of "Erosion and Its Control in Oklahoma Territory," recently issued as a Miscellaneous Publication of the Department of Agriculture.

"Probably nowhere in the world has so much destruction occurred in so short a period of time . . . The region as a whole may serve as warning of the rapidity with which erosion can destroy the agricultural value of land," the Chief states in an introductory foreword.

Mr. McDonald develops the theme with a resume of the agricultural history of the Territory, showing how the one-crop system, the growth of farm tenancy, and unwise farming practices like burning off stubble have within 40 years produced a serious erosion crisis. The body of the text he devotes to a detailed discussion of wind and water erosion in Oklahoma and methods used by the SCS to control each. The bulletin was prepared under the direction of Lois Olson, in charge of the Section's Erosion History Unit.

"Terracing for Soil and Water Conservation," a product of the experience and study of all members of the Engineering Section, is a

60-page Farmers' Bulletin written by C. L. Hamilton which gives the latest and most complete information on the use of terraces on sloping farm fields.

An historical introduction takes the terrace from the time of the Incas in Peru down to the present day. Follows a discussion of the terrace's place in an erosion control program, hydraulic principles to be followed in designing terrace and channel, and different types of terraces and their uses.

Instructions for planning and building a terrace system include specifications for spacing, grade and length, and directions for staking out and constructing the terrace proper, including sections on necessary equipment and costs.

There are numerous charts and tables to illustrate the more technical parts of the text.

Just issued is a catalogue of motion pictures available from the Department of Agriculture, prepared by the Extension Service's Division of Motion Pictures (Miscellaneous Publication No. 288).

Following a note on how to rent or purchase films are listings of new pictures, sound pictures, and the main body of the bulletin--a classified enumeration of all USDA films with a brief description of each. Pictures released in 1938 are not included.

"Watching the Farms Go By," an article on soil erosion and the work of the SCS by Russell Lord, special writer for the Service, appears in the current (June) issue of Cosmopolitan magazine.

SPEAKERS AT WOOSTER

Four papers by members of the Section of Climatic and Physiographic Research were read before the Ohio Academy of Sciences at Wooster on May 6.

"The Establishment of the Muskingum Climatic Research Center," by L. B. Corwin, Project Manager of the Center at New Philadelphia.

"Physiographic Factors of Erosion in the Muskingum Watershed" and "The Geology of the Dam Sites of the Muskingum Watershed Conservancy District," by H. A. Ireland, of the New Philadelphia staff.

"Some Factors in the Development of the Soil Erosion Problem in the Muskingum Watershed," by O. E. Guthe, in charge of field headquarters at Columbus.

TRIP TO COSHOCTON

Early in May the following Washington staff members accompanied Research Chief W. C. Lowdermilk to Coshocton, Ohio, to join the Advisory Committee on Soil Conservation Research of the Geophysical Union at the SCS research project there:

C. E. Ramser, Head, and W. U. Garstka, H. R. Leach, W. D. Potter, L. L. Harold, H. C. S. Thom, and R. S. Goodridge of the Watershed and Hydrologic Section.

C. W. Thornthwaite, Head, Climatic and Physiographic Section.

G. W. Musgrave, Head, Conservation Experiment Stations Section.

After a field inspection trip, meetings were held at which those present gave their views on the work being done and suggestions for future development of the project. W. D. Ellison, in charge of the project, and members of his staff were hosts.

THE GEOPHYSICAL UNION MEETS

The American Geophysical Union, founded "to promote the study of problems concerned with the figure and physics of the Earth; to initiate and coordinate researches which depend upon international and national cooperation, and to provide for their scientific discussion and publication," held its 19th annual meeting at the National Academy of Sciences, Washington, April 27--29.

The following members of, and cooperators with, the Research Division took part in the meetings and round-table discussions of the Union's Section of Hydrology:

W. C. Lowdermilk, Chief of the Research Division, read a paper on "Land-Use and Flood-Flows."

Katharine Clarke-Hafstad, Climatic and Physiographic Section, read a paper on "A Statistical Method for Estimating the Reliability of a Station-Year Record."

R. E. Horton, consulting hydraulic engineer of Voorhesville, N. Y., read the report of the Advisory Committee on Soil Conservation Research, led the round-table discussion of "Preliminary Outline for a Comprehensive Research on Runoff Phenomena," and contributed as appendices to the report of the Special Committee on Flood Waves two papers, "Rain Wave-Trains," and "The Seddon and Forcheimer Equation for Crest-Velocity of River Flood-Waves."

W. D. Potter, of the Section of Watershed and Hydrologic Studies, and M. V. Baker, of the Coshocton, Ohio, Experiment Station, presented "Some of the Factors Influencing the Behavior of Perched Water-Tables at the North Appalachian Experimental Watershed near Coshocton, Ohio."

R. T. Knapp, of the California Institute of Technology, read a paper on "The Energy-Balance in Stream-Flows Carrying Sediment."

H. S. Riesbol, of the Coshocton, Ohio, Experiment Station, contributed "Studies of Rain-Gage Shields and Enclosures," and the discussion of his paper was led by H. C. S. Thom of the Section of Watershed and Hydrologic Studies.

W. E. Smith, hydraulic engineer of the Muskingum River Conservancy District, spoke on "Modifications of the Index-Area Principle and the Anticipated Application of the Principle to Muskingum River Flood-Control."

L. K. Sherman, consulting engineer of Chicago, Ill., read a paper on "Determination of Infiltration-Rates."

ADMINISTRATORS MEETING

The week of May 2--6 saw the eleven Regional Administrators, CCC, in Washington for a series of meetings with the personnel of their own organization, the SCS, and other cooperating agencies.

Each Regional Conservator has as a member of his staff a Regional Administrator who is responsible to him for the administration of all CCC camps within the Region. Particularly, it is the Administrator's duty to see that work carried out by the camps follows policies laid down by the Conservator's staff, and conforms with the CCC ruling on permissible classes of work.

This was the first Washington meeting of the Administrators as a group, and the Chief, in a word of greeting, spoke of the importance to the staff here of getting the point of view of the men in the field. Seventy percent of the Service's work has been accomplished by the camps, he said, and the success of the CCC as an organization is known all over the world.

Others who addressed the Administrators during the Monday morning session: J. J. McEntee, Assistant Director of the CCC, who talked on the primary idea behind the Corps--to get boys off the streets and find employment for them. Some 2,000,000 boys have passed through the CCC; they have been welcomed in the communities in which they have been stationed.

Brig.-Gen. G. P. Tyner, the War Department representative on the CCC Advisory Council, answered Administrators' questions concerning matters of Army policy and procedure.

Fred Morrell, USDA representative on the Council, outlined the representative's function as adviser to CCC Director Robert E. Fechner on matters affecting his own organization.

Rufus E. Miles, Jr., assistant to W. Frank Persons, Labor Department member of the Council, announced that, since camp enrollees no longer have to be taken from the Relief Rolls, it will be possible in future to select applicants on the basis of their adaptability to camp life rather than on that of their families' needs.

H. E. Weatherwax, the Interior Department's representative, thanked the Service for the assistance given the Park Service by SCS camps.

The camp educational program occupied the afternoon session. The Director of CCC Education, H. W. Oxley, gave a resume of the three kinds of education offered at the camps (academic, vocational, and informal) including facts and figures. Some extracts:

Enrollees range from illiterates (3 percent) to Ph.D's (3 individuals).
37 percent have not finished the 8th grade.
More than 5,000 have completed a grammar school course in the camps and received their diplomas from State Boards of Education.
1,500 have received high school diplomas and 39 college diplomas.
Enrollment in academic classes has increased greatly in the past year.
75 percent of the boys are receiving training on the job.
Special teachers have been provided for vocational classes.
Many of these boys didn't know how to play games, and hence the informal type of education, which includes athletics, music, dramatics, arts and crafts, camp papers, discussion groups, etc.

Helen M. Strong, in charge of SCS Educational Relations, emphasized the fact that urban (45 percent of enrollment) as well as rural boys have a stake in conservation, since a large proportion of the raw materials used in manufacturing come from the farm. The value of instruction on the job, visual education, and group discussions in dealing with enrollees should be recognized, Dr. Strong pointed out.

G. D. McKinney, Assistant to Mr. Fechner in charge of Information, and Paul Bissell, the Service's CCC Information man, talked on the function of the field men in supplying Washington with material for press releases and in keeping their local newspapers informed. Both felt that the CCC has had an exceptionally good press.

D. S. Myer, Assistant Chief of the SCS, opened Tuesday's meeting with a discussion of the place of the camps in the district program, stressing the fact that in the districts the SCS, as a contributing agency, will be working through a definite agency set up under State law which has authority and responsibility to carry out a program. The responsibility is with the district, though the Service is charged with giving it the best possible information, guidance, and service. More definite plans for use of the camps in district work have been formulated and are now under consideration in the Department of Agriculture, Mr. Myer announced, and it is anticipated that as demonstration work is completed, funds and personnel will move into the districts program.

H. D. Abbot, in charge of CCC Operations, answered numerous inquiries relative to relocation of camps; C. B. Manifold, Chief of the Division of Conservation Operations, reviewed camp erosion control activities. N. R. Bear, Assistant to Mr. Manifold, took up a number of specific questions arising from the relationship between camp and project personnel, defining the responsibility of the Administrator when difficulties arise.

CCC personnel problems were discussed in the afternoon. S. S. Board, Personnel Adviser of the Department of Agriculture, cited intelligence, physical vigor, and social consciousness as three qualities desirable in those holding administrative positions; C. P. Emery, in charge of SCS Personnel, defined the Administrator's responsibility for inspiring confidence in those under him; and H. M. Salmon, the Service's CCC personnel officer, answered Administrators' queries on personnel matters.

The safety program was taken up on Wednesday morning by S. M. Lauderdale and M. H. Mills, Safety Engineers for CCC and SCS respectively. Mr. Lauderdale announced that camp accidents resulting in lost time declined from 28,000 in 1936 to 11,723 in 1937. Mr. Mills pointed out that responsibility for the safety program rested ultimately with the Regional Conservator. O. B. Sandberg, CCC technician, emphasized the importance of taking care of equipment and guarding against fire hazard.

C. H. Kenlan, Assistant to Mr. Fechner, opened the afternoon session with an account of the duties of camp inspectors. Harry Stanley, of the CCC statistical office, discussed work charts with special reference to reporting of time lost because of bad weather. T. B. Chambers, Head of the Engineering Section, SCS, spoke on the necessity for planning camp work programs ahead to provide suitable work for the winter months. Mr. Chambers classified camp work under three headings:

First priority -- erosion control on private land

Second priority -- erosion control work which benefits a community, like flood control

Third priority - community work in which erosion control is more or less secondary.

Under the district program, Mr. Chambers said, it will be better to show farmers how to do their own erosion control work and use the camps on work of second priority.

R. S. Richardson, chief liason officer of the CCC, discussed on Thursday morning the necessity for seeing that regulations of one department do not conflict with those of another. A. S. Imirie, Assistant Head of the Service's CCC operations, analyzed in detail the duties of an Administrator. Specific questions on the CCC budget, payrolls, and fiscal procedure were covered in the afternoon by F. J. Hopkins and G. G. Smith of the SCS Division of Administration.

Each Regional Administrator conducted one discussion period during the session.

Mr. Abbot closed the conference on Friday morning by asking the Administrators to send in suggestions for the form in which future meetings should be held.

REGION 4 MEN IN WASHINGTON

L. P. Merrill, Region 4's Conservator; H. S. Moyer, Administrative officer at Fort Worth; J. W. Sargent, G. K. Fletcher, and P. H. Walser, State Coordinators of Arkansas, Louisiana, and Texas, respectively, arrived in Washington on May 16 to discuss with the Chief and with Division Heads the "Arkansas Plan" for administrative reorganization in the field.

ROWALT TO COORDINATOR'S OFFICE

E. M. Rowalt, of the Section of Information, has left the Service to go with the Office of Land Use Coordination in the office of the Secretary of Agriculture, where he will act as interpretive writer on conservation and land use policy.